

### WINNIE-O

~60° + 20° oval beam. Holder with 35 mm screw hole distance according to Zhaga standard. Compatible with Bender+Wirth 4xx Typ L5 connector.

#### SPECIFICATION:

Dimensions	Ø 49.8 mm
Height	19.3 mm
Fastening	screw
ROHS compliant	yes ⓘ



#### MATERIALS:

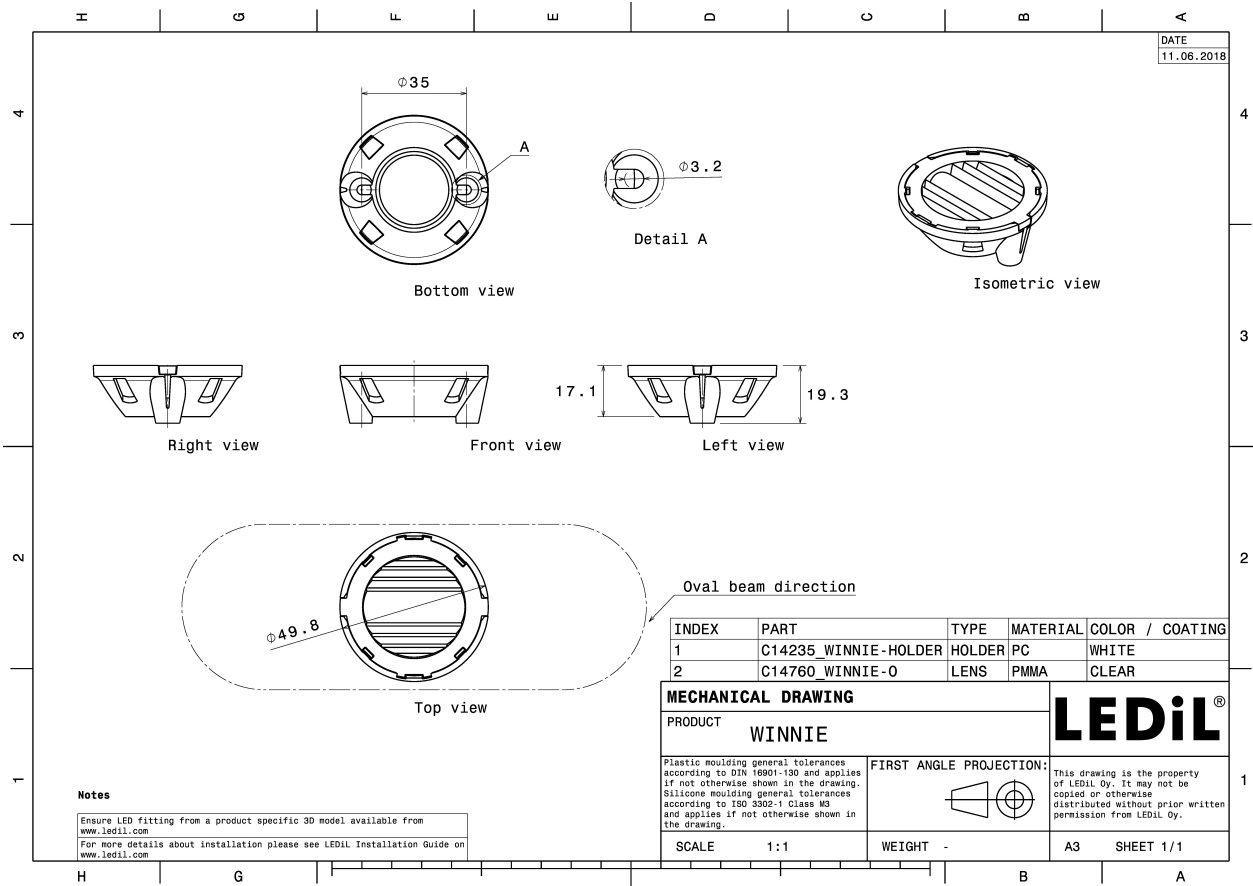
Component	Type	Material	Colour	Finish	Length
C14760_WINNIE-O	Single lens	PMMA	clear		49.6
C14235_WINNIE-HOLDER	Holder	PC	white		49.8

#### ORDERING INFORMATION:

##### Quantities for one set:

Single lens	1
Holder	1

Component		Qty in box	MOQ	MPQ	Box weight (kg)
C14760_WINNIE-O	Single lens	364	84	28	7.0
» Box size: 480 x 280 x 300 mm					
C14235_WINNIE-HOLDER	Holder	1820	84	28	7.2
» Box size: 480 x 280 x 300 mm					

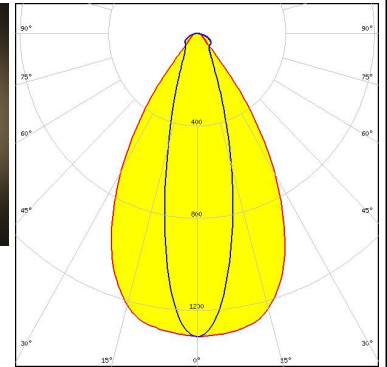


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### OPTICAL RESULTS (MEASURED):

bridgelux

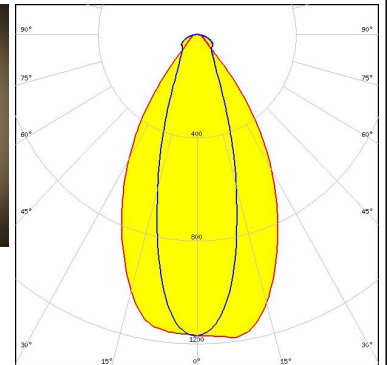
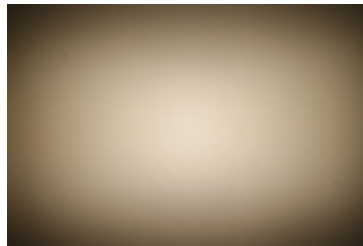
LED V13 Gen6  
 FWHM / FWTM 62.0 + 27.0° / 85.0 + 60.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

bridgelux

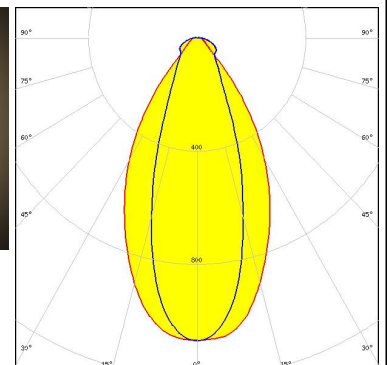
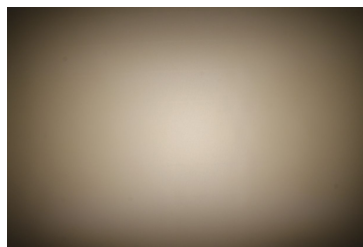
LED V15 Gen6  
 FWHM / FWTM 59.0 + 31.0° / 87.0 + 71.0°  
 Efficiency 89 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

bridgelux

LED V18 Gen6  
 FWHM / FWTM 57.0 + 35.0° / 89.0 + 80.0°  
 Efficiency 89 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

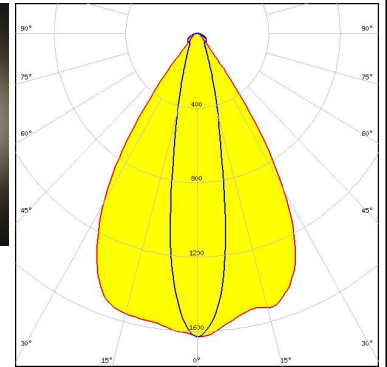


Light distribution files

### OPTICAL RESULTS (MEASURED):



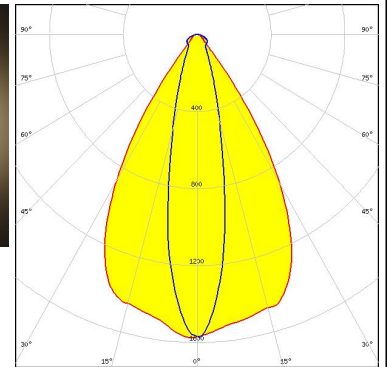
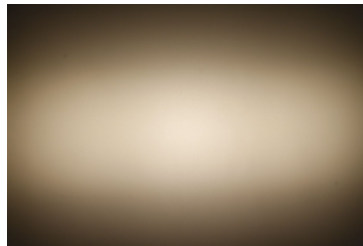
LED V8 Gen6  
 FWHM / FWTM 65.0 + 21.0° / 81.0 + 47.0°  
 Efficiency 89 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

### CITIZEN

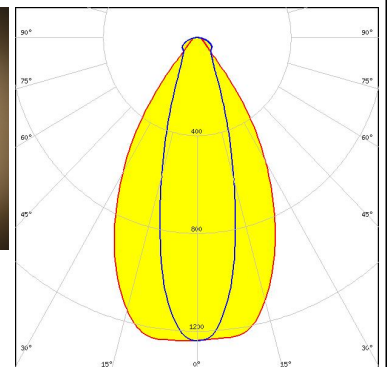
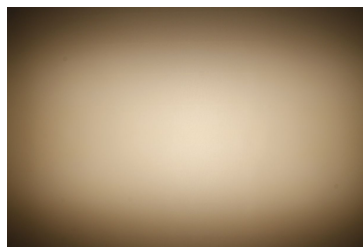
LED CLL02x/CLU02x (LES10)  
 FWHM / FWTM 63.0 + 22.0° / 82.0 + 52.0°  
 Efficiency 90 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 434 Typ L5



Light distribution files

### CITIZEN

LED CLL03x/CLU03x  
 FWHM / FWTM 59.0 + 29.0° / 85.0 + 66.0°  
 Efficiency 90 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 433 Typ L5

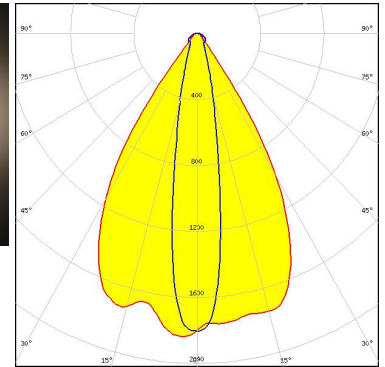


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### CITIZEN

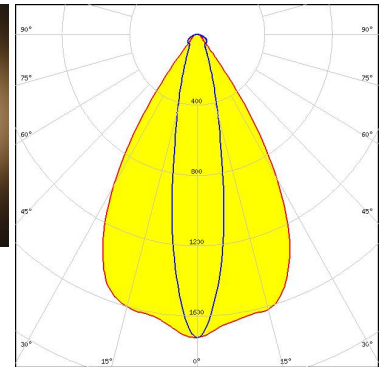
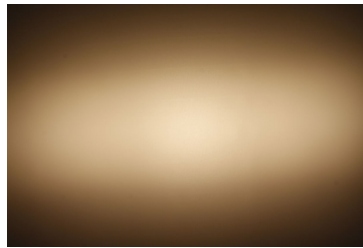
LED CLU700/701/702/703  
 FWHM / FWTM 64.0 + 18.0° / 79.0 + 43.0°  
 Efficiency 91 %  
 Peak intensity 1.8 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### CITIZEN

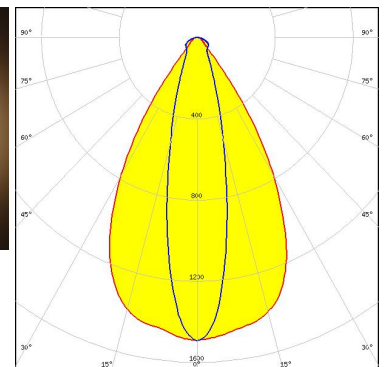
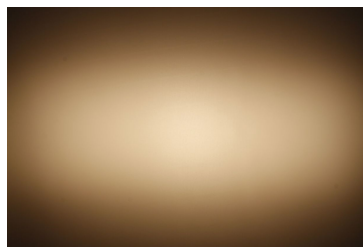
LED CLU710/711  
 FWHM / FWTM 63.0 + 20.0° / 81.0 + 48.0°  
 Efficiency 91 %  
 Peak intensity 1.7 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 470 Typ L5



Light distribution files

#### CITIZEN

LED CLU720/721/723  
 FWHM / FWTM 61.0 + 23.0° / 83.0 + 55.0°  
 Efficiency 90 %  
 Peak intensity 1.5 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 433 Typ L5

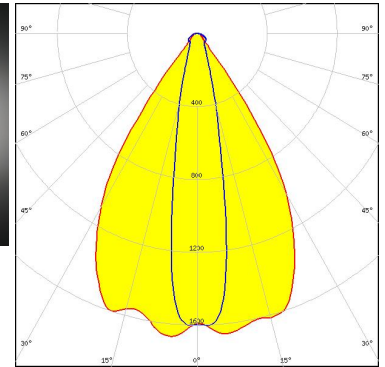
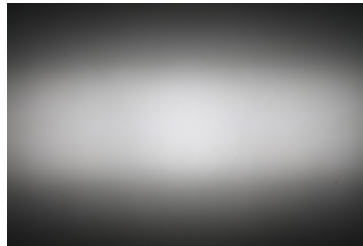


Light distribution files

### OPTICAL RESULTS (MEASURED):



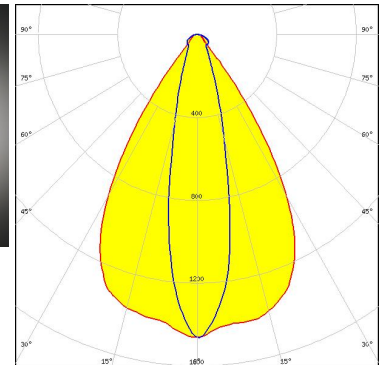
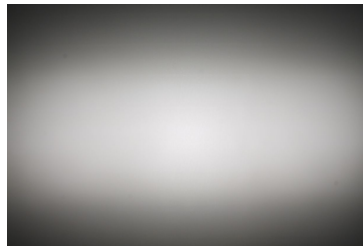
LED CXA/B 13xx  
 FWHM / FWTM 66.0 + 20.0° / 81.0 + 45.0°  
 Efficiency 90 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



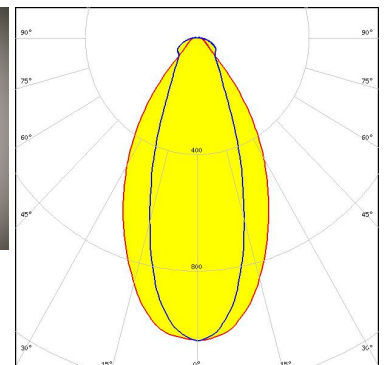
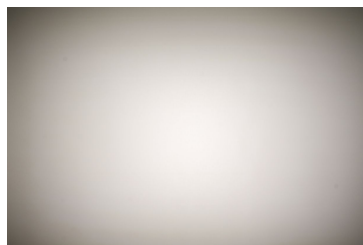
LED CXA/B 15xx  
 FWHM / FWTM 65.0 + 23.0° / 83.0 + 52.0°  
 Efficiency 89 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED CXA/B 25xx  
 FWHM / FWTM 57.0 + 37.0° / 91.0 + 83.0°  
 Efficiency 89 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

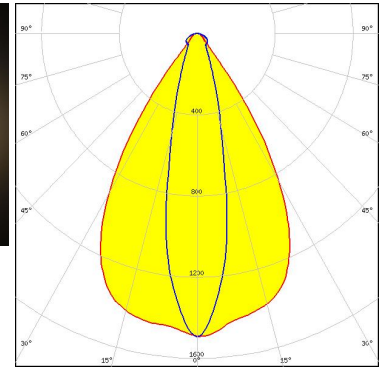
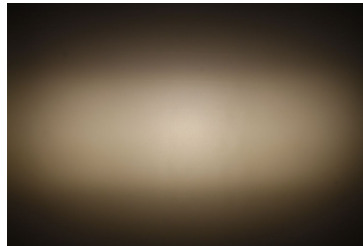


Light distribution files

### OPTICAL RESULTS (MEASURED):



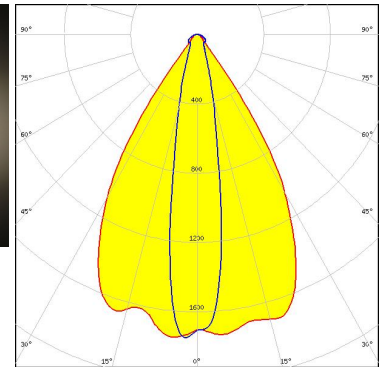
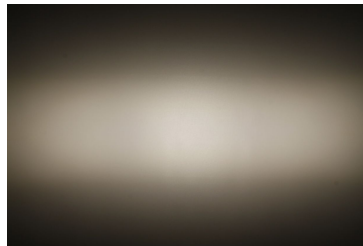
LED LUXEON CoB 1202/1203  
FWHM / FWTM 64.0 + 23.0° / 82.0 + 53.0°  
Efficiency 89 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



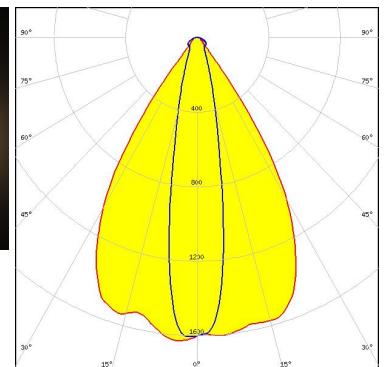
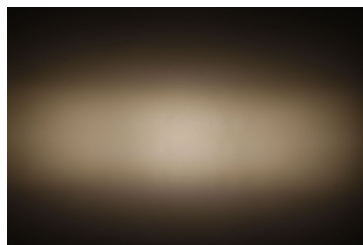
LED LUXEON CoB 1202s  
FWHM / FWTM 65.0 + 19.0° / 80.0 + 43.0°  
Efficiency 90 %  
Peak intensity 1800 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON CoB Compact  
FWHM / FWTM 65.0 + 20.0° / 81.0 + 46.0°  
Efficiency 88 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



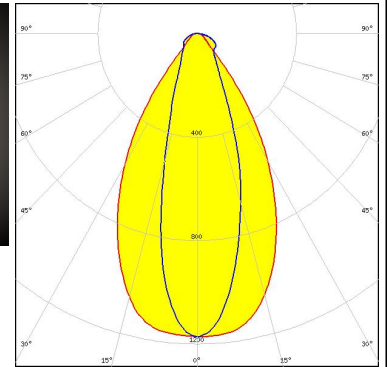
Light distribution files



### OPTICAL RESULTS (MEASURED):



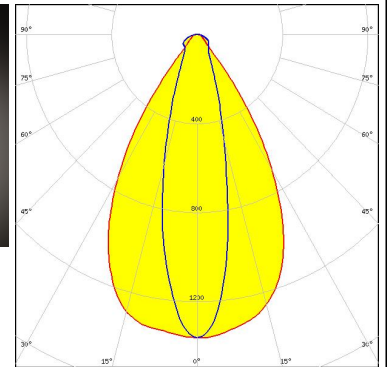
LED COB J-Type  
 FWHM / FWTM 59.0 + 31.0° / 86.0 + 71.0°  
 Efficiency 89 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



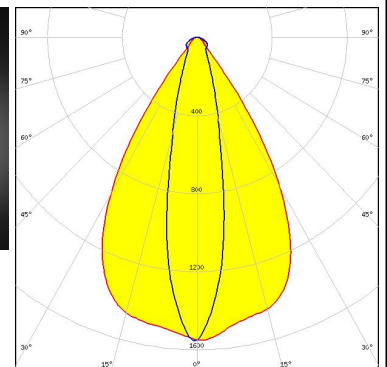
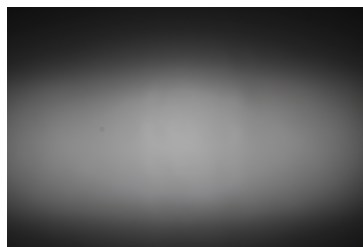
LED COB L-Type (LES 11)  
 FWHM / FWTM 62.0 + 25.0° / 83.0 + 59.0°  
 Efficiency 89 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED COB L-Type (LES 11)  
 FWHM / FWTM 64.0 + 22.0° / 82.0 + 51.0°  
 Efficiency 90 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

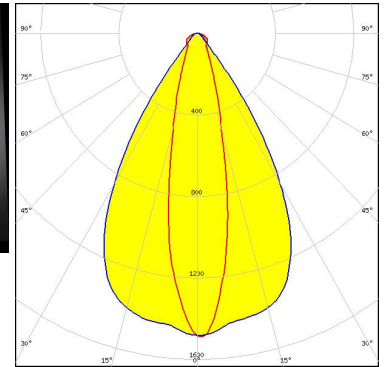


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

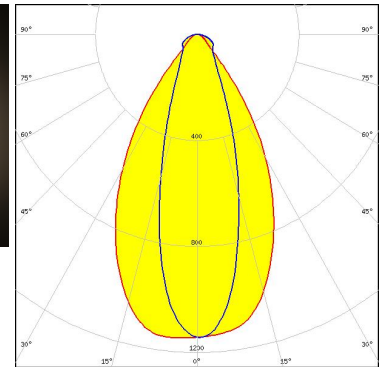
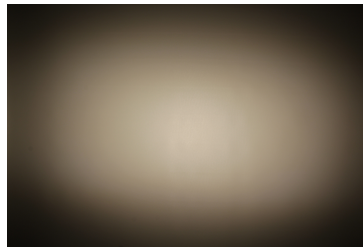
LED LC003D / LC006D / LC009D / LC013D  
 FWHM / FWTM 63.0 + 23.0° / 82.0 + 53.0°  
 Efficiency 87 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

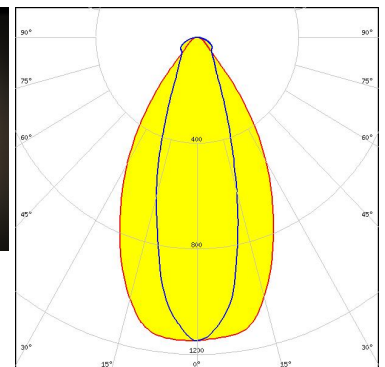
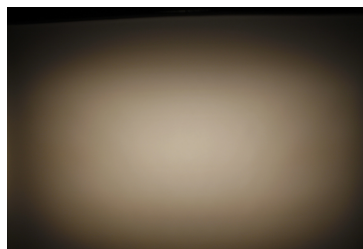
LED LC016D / LC019D / LC026D / LC033D  
 FWHM / FWTM 59.0 + 31.0° / 87.0 + 71.0°  
 Efficiency 85 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

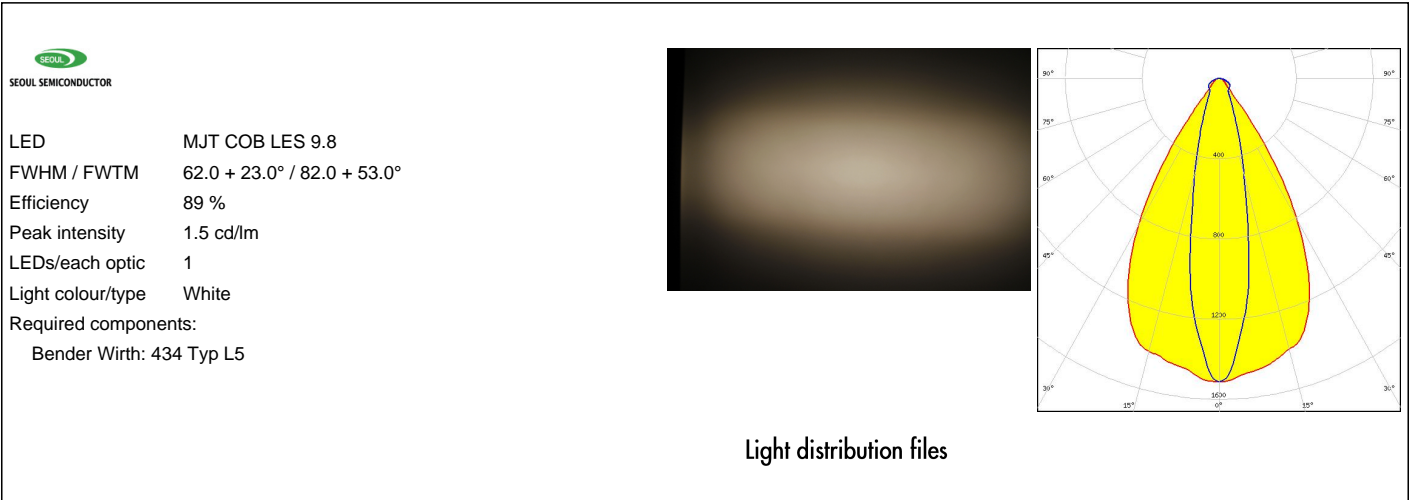


LED MJT COB LES 14.5  
 FWHM / FWTM 58.0 + 32.0° / 86.0 + 73.0°  
 Efficiency 86 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:  
 Bender Wirth: 433 Typ L5



Light distribution files

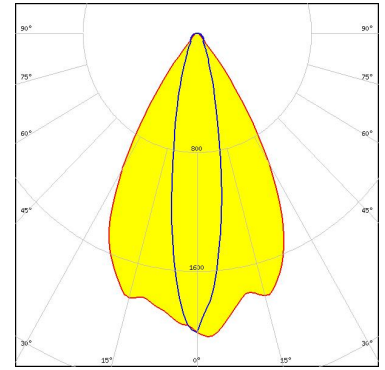
### OPTICAL RESULTS (MEASURED):



### OPTICAL RESULTS (SIMULATED):



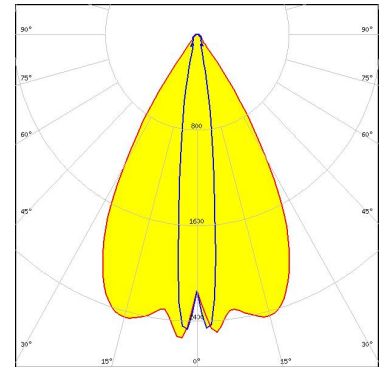
**LED** VERO10  
**FWHM / FWTM** 60.0 + 20.0° / 80.0 + 48.0°  
**Efficiency** 100 %  
**Peak intensity** 2.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



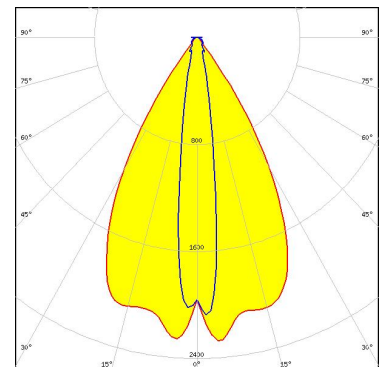
**LED** XP-E2  
**FWHM / FWTM** 60.0 + 14.0° / 75.0 + 29.0°  
**Efficiency** 93 %  
**Peak intensity** 2.9 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** XP-G3  
**FWHM / FWTM** 60.0 + 15.0° / 76.0 + 32.0°  
**Efficiency** 91 %  
**Peak intensity** 2.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**

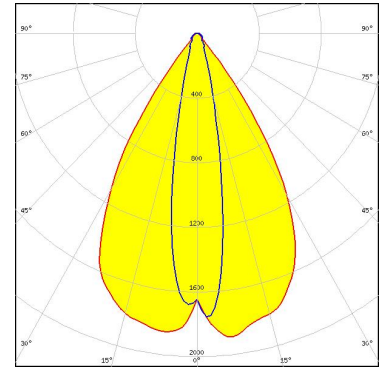


Light distribution files

### OPTICAL RESULTS (SIMULATED):



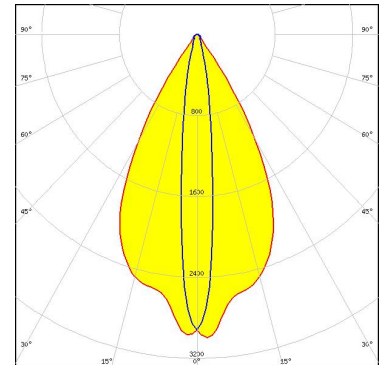
LED LUXEON M/MX  
FWHM / FWTM 20.0 + 64.0° / 41.0 + 81.0°  
Efficiency 92 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



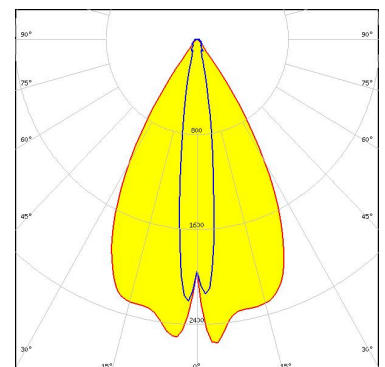
LED SBT-90  
FWHM / FWTM 56.0 + 12.0° / 74.0 + 32.0°  
Efficiency 93 %  
Peak intensity 3 cd/lm  
LEDs/each optic 1  
Light colour/type Red  
Required components:



Light distribution files



LED OSOLON Square CSSRM2/CSSRM3  
FWHM / FWTM 58.0 + 14.0° / 76.0 + 30.0°  
Efficiency 91 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

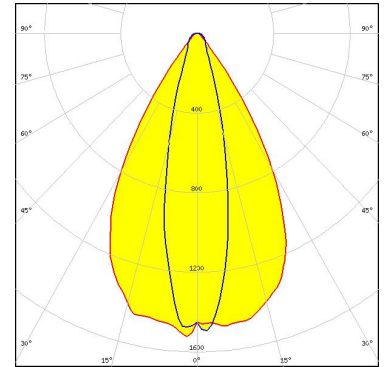


Light distribution files

### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

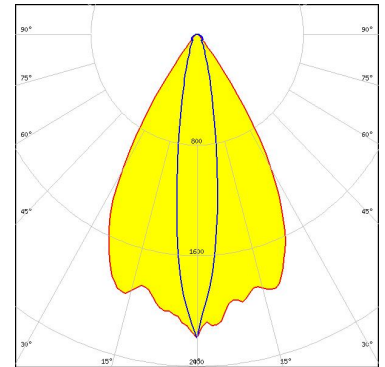
LED Soleriq S9  
FWHM / FWTM 61.0 + 24.0° / 83.0 + 51.0°  
Efficiency 88 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**SAMSUNG**

LED LC010C  
FWHM / FWTM 56.0 + 16.0° / 78.0 + 40.0°  
Efficiency 92 %  
Peak intensity 2.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

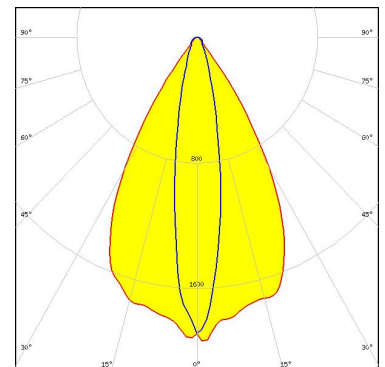


Bender Wirth: 479 Typ L5

Light distribution files

**SAMSUNG**

LED LC020C  
FWHM / FWTM 60.0 + 18.0° / 79.0 + 44.0°  
Efficiency 89 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Bender Wirth: 479 Typ L5

Light distribution files

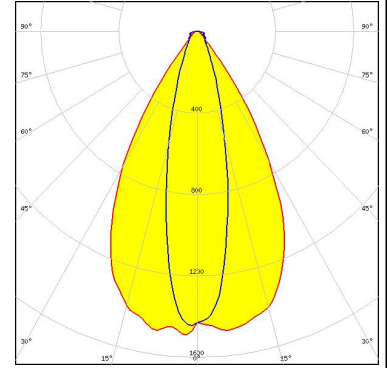
### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

LED	LC040C
FWHM / FWTM	60.0 + 24.0° / 82.0 + 55.0°
Efficiency	87 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Bender Wirth: 479 Typ L5

Light distribution files



### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

### MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

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Shenzhen 518057  
P.R.CHINA

#### Local sales and technical support

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

Poznan, Poland  
Hong Kong, China

#### Distribution Partners

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where\\_to\\_buy](http://www.ledil.com/where_to_buy)